

Syphilitic juxta-articular nodes: case report

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SUMMARY Multiple juxta-articular nodes occurring in usual and unusual sites in a patient with late syphilis are described.

Introduction

Juxta-articular nodes (Lutz-Jeanselme nodules) are usually found around large joints in people suffering from late treponematoses. These firm subcutaneous nodules, which are often arranged symmetrically, are not attached to skin or to deeper structures. They are found usually in patients with yaws or pinta, occasionally in those with endemic syphilis, and rarely in those with venereal syphilis,¹ and are now rarely seen with the widespread use of antitreponemal treatment.²⁻⁴ We report this case to alert the medical profession.

Case report

A married labourer aged 26 was referred to the department of sexually transmitted disease (STD) of this hospital in December 1984 as he had noticed painless subcutaneous nodules near some joints and serological tests for syphilis gave positive results. The slowly progressing nodules of 10 to 20 mm in size had been present for more than four years. His only other symptom was mild generalised arthralgia. He had had both premarital and extramarital sexual contact, the last extramarital contact having been six years previously. He had had a sore on his penis eight and six years previously and had been treated at the local clinic with some injections and tablets, of which he could not give further details.

On examination he was uncircumcised and had vitiligo of the glans penis. No genital ulcer, scar, or discharge was found. The inguinal lymph nodes were enlarged, discrete, firm, and painless on both sides. He had no anal, scrotal or oral lesions. He had two to three hard fibrous nodules near both elbows, three on each hip, and a single nodule on each side of both knees. These non-tender nodules varied in size from 10 to 20 mm, and were situated over the lateral aspect of these

joints (fig 1). Smaller painless nodules up to 5 mm in diameter were also noted over the interphalangeal joints of the index, middle, and ring fingers of the right hand and over the same joints of the index and ring fingers of the left hand (fig 2). The nodules were not attached to skin or to deeper structures and were mobile.

On admission, the Venereal Diseases Research Laboratory (VDLR) slide test was reactive at a



FIG 1 Multiple juxta-articular nodes before treatment.



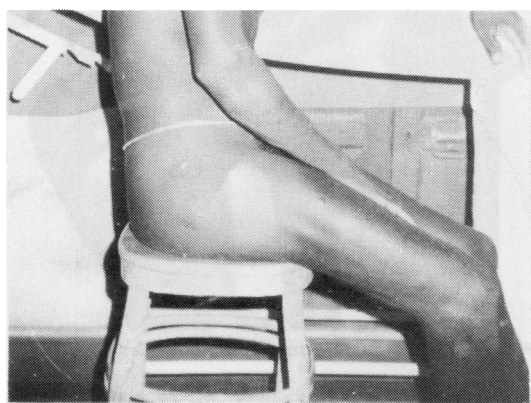
FIG 2 Juxta-articular nodes of smaller joints before treatment.

dilution of 1/32 and the *Treponema pallidum* haemagglutination assay (TPHA) also gave positive results. The cerebrospinal fluid was normal. Radiological examination of the chest, long bones, and the joints concerned showed no abnormality.

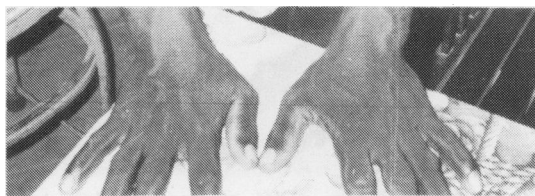
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Before treatment, biopsy specimens were taken from the nodules on the left elbow and left knee. Histologically the nodule on the elbow showed hyalinised fibrotic tissue in the dermis; and fibrous fatty tissue containing the foci of inflammatory cells was found in the lesion removed from the knee.

The patient was treated with benzathine penicillin 2.4 MIU by intramuscular injections weekly for four weeks. No Jarisch-Herxheimer reaction was noted. Three days after the first injection the consistency of all nodules except those of the knees became less hard. After the second injection the nodules on the left hip completely disappeared and most of the others showed regression. The nodules on the knees and left elbow, however, were unchanged. Three weeks after the completion of treatment, all nodules were subsiding and those of the knee and elbow had also softened and started subsiding. Three months later the nodules of the hips, knees, and fingers had almost subsided (figs 3 and 4). Those around the left elbow had softened and were less prominent. The VDRL slide test was reactive at a dilution of 1/8. Eight months after treatment all nodules except that of the left elbow, which was soft, had regressed and the VDRL titre had fallen to 1/4 (figs 5 and 6).



FIGS 3 & 4 *Three months after treatment.*



of juxta-articular nodes of late syphilis.³ The response to antisyphilitic treatment offered additional confirmation. There was no clinical or laboratory evidence that these nodules were caused by onchocerciasis, loiasis, rheumatoid arthritis, rheumatic fever, gout, sarcoidosis, or calcinosis. The consistency of the nodules was not that of lipomata. Multiple neurofibromatosis was also most unlikely, as the sites were only in the vicinity of joints and were symmetrical. As yaws, pinta, and endemic syphilis are rare in our locality, it is unlikely that the patient had a non-venereal treponematoses.

Though there are many reports of juxta-articular nodes at the hips, knees, and elbows,^{1,4,6} we could not find a report of multiple nodes at the smaller joints of the fingers, as in this case. The histopathology of juxta-articular nodes has been described by various workers.^{4,6} Sometimes findings were not specific.^{2,4} Lever distinguished three stages in their development.⁵ In the case described here two lesions showed hyalinisation, foci of inflammatory cells, and fibrosis. In late benign syphilis the serological tests are almost always reactive and usually at high titres.⁷ Our patient's serum also was reactive at a high dilution.

The rare manifestations of syphilis, described by various authors from the beginning of this century, are still seen, and syphilis may still present in an atypical form.⁸ A high index of suspicion among doctors is



FIGS 5 & 6 *Eight months after treatment.*



Discussion

Multiple firm, symmetrical, painless, subcutaneous nodules of this type in a patient with a history of syphilis and reactive serology indicated the diagnosis

necessary to recognise the rare features of late syphilis.

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